

Center for Educational Performance and Information

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Background on Graduation and Dropout Rates June 2004 (revised 2/20/2005)

In 1990, the Michigan Department of Education (MDE) consolidated several data collection forms so that a single form for pupil headcount purposes was developed to collect the information necessary to meet state and federal reporting requirements. The Pupil Headcount Report (IM-4203) form was designed so that pupil information could be reported at the building level. The student data were aggregated for each building and submitted via an electronic network called the Education Data Network (EDN).

Since 1990, the four-year estimated graduation and one-year dropout rates have been calculated utilizing the same formulas which were initially developed by a group of professional research consultants from within MDE, as well as staff from local education agencies and intermediate school districts. The one-year dropout rate is derived from the retention rate, which is calculated for students who can be accounted for. Thus, students who are unaccounted for are considered to be dropouts. The four-year graduation rate indicates, with no change in future retention rates, the percentage of ninth-grade students who will complete their senior year of school and graduate.

In 2000, the Center for Educational Performance and Information (CEPI) was created under Executive Order 2000-9. The responsibilities for maintaining the IM-4203 pupil headcount data collection process and the calculations required for the graduation and dropout rates were transferred to this agency.

Section 19 of the State School Aid Act mandates CEPI to provide the Legislature with a District and High School Graduation Report. The report includes both a one-year dropout and a four-year estimated graduation rate for the high schools, the districts, and the state. In addition, CEPI is also required to provide statistical information to the U.S. Department of Education.

During the fall of 2002, CEPI officially began collecting single student records. CEPI had planned to utilize the Single Record Student Database (SRSD) to calculate the graduation and dropout rates using the same formulas as had been used in the past; however, after analyzing the 2003-2004 school year data submitted by the school districts, CEPI concluded that the data were again of uneven quality and could not solely be utilized to calculate the graduation and dropout rates. It was concluded that the EDN application would again be pre-populated with the SRSD data, and school districts would again be afforded the opportunity to review, validate and correct data extracted from the SRSD submissions.

In February 2005, MDE and CEPI jointly mailed correspondence to local education agency (LEA) superintendents and to public school academy (PSA) administrators concerning reopening the EDN for the purpose of calculating the 2003-2004 graduation and dropout rates. Reopening the EDN will allow school districts the opportunity to make corrections to the 2004-2005 Pupil Headcount Report IM-4203, which is utilized to generate the 2003-2004 graduation and dropout rates.

The SRSD exit codes are included in Appendix A. The processes to determine the data pre-populated into the EDN are documented as business rules. The following pages will detail the business rules utilized to extract the 2003-2004 school year SRSD data.

For all SRSD submissions, only those records that passed the CEPI Error Check will be included. CEPI will eliminate records that are total duplicates and retain only a single record for each student.

Fall 2003 Submission

These data are currently available via EDN.

Spring 2004 and End-of-Year 2004 Submissions

- Step 1: Select all records with a grade level equal to "09," "10," "11," or "12" in Field 19: Grade or Setting.
- Step 2: Remove all records that have a "1" in the seventh position (Migrant) or a "1" in the eighth position (Adult) of Field 29: Program Eligibility/Participation.
- Step 3: Remove all records that have a "1" in the first position (Alternative Education) of Field 125: Program Eligibility/Participation II.
- Step 4: Remove all nonpublic and home-schooled student records that have a code equal to "04," "07," "08," or "15" in Field 30: Student Residency. Residency is not submitted for EOY 2004 submission.
- Step 5: Remove all records with an invalid exit date (Field 24: Date Exited):
 - Spring 2004
 - o Remove records with an exit date on or prior to fall 2003 count date.
 - o Remove records with an exit date after spring 2004 count date.
 - EOY 2004
 - o Remove records with an exit date on or prior to spring 2004 count date.
 - o Remove records with an exit date after EOY 2004 count date.
- Step 6: Identify all duplicate records based on district code (Field 3: Operating District Number), school code (Field 5: School or Facility), last name (Field 6: Student's Last Name), first name (Field 7: Student's First Name), date of birth (Field 9: Date of Birth), and gender (Field 11: Gender Code).
- Step 7: Split file into two data sets:
 - 1. One with the non-duplicate records.
 - 2. One with the duplicate records (de-duplicate).
- Step 8: De-duplicate: The goal is to have one unique record per student per cycle per district per school code.
 - If two or more records have different enrollment dates and none have exit dates, then select the record with the most recent enrollment date.
 - If two or more records have different enrollment dates and one or more of the records have an exit date, select the record with the most recent enrollment or exit date.
 - If two or more records have the same enrollment date, then check the exit dates. If an exit date exists in one or more records and the exit date is after the enrollment date, then select the record with the most recent exit date. Otherwise, select the record without the exit date.
 - If two or more records have the same enrollment date and none of the records have exit dates, select the record that has been identified as the first duplicate record.

- Step 9: Concatenate the de-duplicated file with the non-duplicate file.
- Step 10: Assign each record to a graduating year based on grade level (e.g., 12th=2004, 11th=2005, etc.).
- Step 11: Categorize each record (see Appendix A) as:
 - **Graduate** If the exit status (Field 23: District Exit Status) is equal to "01," "02," "04," "05," "06," or "20" and grade (Field 19: Grade or Setting) is equal to "11" or "12," count as a graduate.
 - **Transfer IN** new to the district
 - o Spring 2004 If the enrollment date (Field 20: Date of Enrollment) is after fall 2003 count date and on or before spring 2004 count date, count as transfer IN.
 - o EOY 2004 If the enrollment date (Field 20: Date of Enrollment) is after spring 2004 count date and on or before EOY 2004 count date, count as transfer IN.
 - **Transfer OUT** If the exit status is equal to "03," "08," "09," "12," "14," "15," "25," or "26," count as transfer OUT.
- Step 12: Aggregate by district code by school code by graduating year by category.

This file will be the base file used for the spring/EOY 2004 transfer and graduation information.

Fall 2004 Submission

- Step 1: Select all records with a grade level equal to "09," "10," "11," or "12" in Field 19: Grade or Setting.
- Step 2: Remove all records that have a "1" in the seventh position (Migrant) or a "1" in the eighth position (Adult) of Field 29: Program Eligibility/Participation.
- Step 3: Remove all records that have a "1" in the first position (Alternative Education) of Field 125: Program Eligibility/Participation II.
- Step 4: Remove all nonpublic and home-schooled student records that have a code equal to "04," "07," "08," or "15" in Field 30: Student Residency.
- Step 5: Remove all records with an invalid exit date (Field 24: Date Exited):
 - 1. Remove records with an exit date on or prior to EOY 2004 count date.
 - 2. Remove records with an exit date after fall 2004 count date.
- Step 6: Identify all duplicate records based on district code (Field 3: Operating District Number), school code (Field 5: School or Facility), last name (Field 6: Student's Last Name), first name (Field 7: Student's First Name), date of birth (Field 9: Date of Birth), and gender (Field 11: Gender Code).
- Step 7: Split file into two data sets:
 - 1. One with the non-duplicate records.
 - 2. One with the duplicate records (de-duplicate).
- Step 8: De-duplicate: The goal is to have one unique record per student per cycle per district per school code.
 - If two or more records have different enrollment dates and none have exit dates, then select the record with the most recent enrollment date.

- If two or more records have different enrollment dates and one or more of the records have an exit date, select the record with the most recent enrollment or exit date.
- If two or more records have the same enrollment date, then check the exit dates. If an exit date exists in one or more records and the exit date is after the enrollment date, then select the record with the most recent exit date. Otherwise, select the record without the exit date.
- If two or more records have the same enrollment date and none of the records have exit dates, select the record that has been identified as the first duplicate record.

Step 9: Concatenate the de-duplicated file with the non-duplicate file.

Step 10: Assign each record to a graduating year based on grade level, taking into account that the 12th graders in fall 2004 are the same cohort as the 11th graders from EOY 2004 (e.g., 12th=2005, 11th=2006).

Step 11: Categorize each record (see Appendix A) as:

- **Graduate** If the exit status (Field 23: District Exit Status) is equal to "01," "02," "04," "05," "06," or "20" and grade (Field 19: Grade or Setting) is equal to "11," or "12," count as a graduate.
- **Transfer IN** new to the district
 - o If the enrollment date (Field 20: Date of Enrollment) is after EOY 2004 count date and on or before fall 2004 count date, count as transfer IN.
- **Transfer OUT** If the exit status is equal to "03," "08," "09," "12," "14," "15," "25," or "26," count as transfer OUT.
- **Continuing** If the exit status is equal to "19," count as continuing.

Step 12: Aggregate by district code by school code by graduating year by category.

This concatenated file will be the base file used for the fall 2004 enrollment, class of 2004 graduates, and transfers.

There are a myriad of ways in which one could calculate dropout and graduation rates. The procedure described here utilizes the same basic methodology that was used with the EDN for the past ten years to calculate the rates. The only differences are reflections of current legislation and use of the SRSD as the primary data source.

Upon implementation of the student data warehouse, additional business rules concerning student mobility will be applied.

APPENDIX A

Categorization of Exit Codes for Graduation/Dropout Rate Calculation		
Exit Code	Exit Definition	Category
01	Graduated from general education with a	Graduate
	diploma	
02	Graduated from general education with a	Graduate
	diploma and applied to a degree-granting	
	college or university	
03	Graduated from an alternative program	Transfer out
04	Graduated from general education with a	Graduate
	diploma and applied to a non-degree-granting	
	institution	
05	Completed general education with an	Graduate
	equivalency certificate	
06	Completed general education with other	Graduate
	certificate	
07	Dropped out of school	Dropout
08	Enrolled in another district in Michigan	Transfer out
09	Moved out of state	Transfer out
10	Expelled from the school district (no further	Dropout
	services)	
11	Enlisted in military or Job Corps	Dropout
12	Deceased	Transfer out
13	Incarcerated	Dropout
14	Enrolled in home school	Transfer out
15	Enrolled in non-public school	Transfer out
16	Unknown	Dropout
17	Placed in a recovery or rehabilitative program	Dropout
18	Left Adult Education	Not applicable
19	Expected to continue in the same school	Currently enrolled – continuing
	district	education in the district
20	Received certificate of completion or finished	Graduate
	individualized education program (IEP)	
	requirements	
21	Reached maximum age	Dropout
22	Declassified	Currently enrolled – continuing
		education in the district
25	Enrolled in another district, known to continue	Transfer out
	in special education	
26	Enrolled in another district, known not to	Transfer out
	continue in special education	